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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/807,984

03/24/2004

Mari Ichimura

09792909-5829

4456

26263 7590 04/19/2007  
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EXAMINER

GARRETT, DAWN L

ART UNIT

PAPER NUMBER

1774

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
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3 MONTHS

04/19/2007

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

**Office Action Summary**

Application No.

10/807,984

Applicant(s)

ICHIMURA ET AL.

Examiner

Dawn Garrett

Art Unit

1774

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 06 March 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-26 is/are pending in the application.
- 4a) Of the above claim(s) 10-26 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-9 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 24 March 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Response to Amendment*

1. This Office action is responsive to the amendment and terminal disclaimer filed February 2, 2007 and the translations of the foreign priority documents filed March 6, 2007. Claims 10-26 remain withdrawn as non-elected. Claims 1-9 are currently under consideration.
2. The species that remains under consideration is Formula A where R<sup>e</sup> and R<sup>i</sup> are cyano groups.
3. The rejection of claims 1, 2, and 5-9 under 35 U.S.C. 102(a) as being anticipated by Ishibashi et al. (WO 2004/003104 A1) is withdrawn due to the translations of the foreign priority documents that were submitted on March 6, 2007.
4. The rejection of claims 1, 2, and 5-9 under 35 U.S.C. 102(e) as being anticipated by Ishibashi et al. (US 2005/0064232 A1) is withdrawn due to the translations of the foreign priority documents that were submitted on March 6, 2007.
5. The double patenting rejection over co-pending Application No. 10/487,584 is withdrawn due to the terminal disclaimer filed on February 2, 2007.

### *Claim Rejections - 35 USC § 102*

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

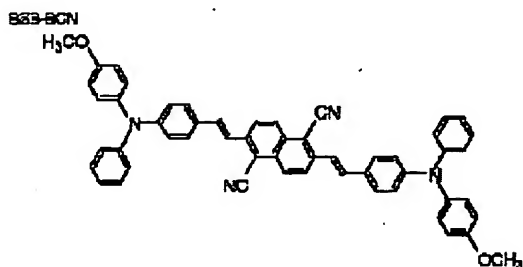
A person shall be entitled to a patent unless –

- (a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.
- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- (c) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this

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subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

7. Claims 1, 2, and 6-9 are rejected under 35 U.S.C. 102(a) as being anticipated by Tamura et al. (JP 2002-246175). Tamura et al. discloses electroluminescent elements comprising the following compound:



(see abstract and par. 66). The above compound reads upon instant Formula A wherein R<sup>a</sup> and R<sup>b</sup> are a substituted and an unsubstituted aryl group respectively, R<sup>c</sup> and R<sup>i</sup> are cyano groups (as required by the present species election), R<sup>c</sup>, R<sup>d</sup>, R<sup>h</sup>, and R<sup>g</sup> are hydrogen atoms, R<sup>f</sup> represents a substituted unsaturated alkyl group. It is further noted that an “unsaturated alkyl group” as claimed is being interpreted to include an alkenyl group.

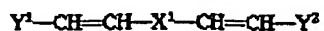
8. Claims 1-9 are rejected under 35 U.S.C. 102(e) as being anticipated by Ishibashi et al. (US 2002/0106530 A1).

The applied reference has common inventors with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art under 35 U.S.C.

102(e). This rejection under 35 U.S.C. 102(e) might be overcome either by a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not the invention “by another,” or by an appropriate showing under 37 CFR 1.131.

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Ishibashi et al. discloses electroluminescent elements comprising the following compound :



General formula (I)

(see par. 18-19) wherein X1 may be a cyano-substituted naphthyl group and Y2 is a phenyl amino group (see par. 20). The above compound reads upon instant Formula A R<sup>e</sup> and R<sup>i</sup> are cyano groups (as required by the present species election), R<sup>c</sup>, R<sup>d</sup>, R<sup>h</sup>, and R<sup>g</sup> are hydrogen atoms, and R<sup>f</sup> represents a substituted unsaturated alkyl group. It is further noted that an “unsaturated alkyl group” as claimed is being interpreted to include an alkenyl group. Ishibashi et al. discloses with regard to claims 3-5 that the aminostyryl compounds are part of the hole transfer layer (hole-transporting), electron transfer layer (electron-transporting) or both of the hole transfer and electron transfer layers (one of these includes the luminescent function) (see abstract).

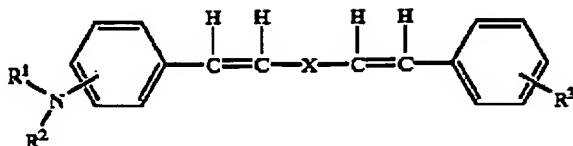
9. Claims 1-9 are rejected under 35 U.S.C. 102(e) as being anticipated by Ishibashi et al. (US 2003/0099863 A1).

The applied reference has common inventors with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 102(e) might be overcome either by a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not the invention “by another,” or by an appropriate showing under 37 CFR 1.131.

Ishibashi et al. discloses electroluminescent elements comprising the following compound :

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General formula (1):



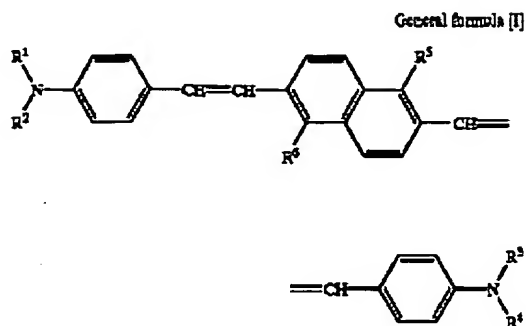
(see abstract and specific compound at par. 114) wherein X may be a cyano-substituted naphthyl group (see par. 40). The above compound reads upon instant Formula A wherein R<sup>e</sup> and R<sup>i</sup> are cyano groups (as required by the present species election), R<sup>c</sup>, R<sup>d</sup>, R<sup>h</sup>, and R<sup>g</sup> are hydrogen atoms, and R<sup>f</sup> represents a substituted unsaturated alkyl group. It is further noted that an “unsaturated alkyl group” as claimed is being interpreted to include an alkenyl group. Ishibashi et al. discloses the layers required by instant claims 3-5 (see ‘863 claims 9-11).

10. Claims 1, 2, and 6-9 are rejected under 35 U.S.C. 102(e) as being anticipated by Ichimura et al. (US 6,492,557 B1).

The applied reference has common inventors with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 102(e) might be overcome either by a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not the invention “by another,” or by an appropriate showing under 37 CFR 1.131.

Ichimura et al. discloses electroluminescent elements comprising the following compound :

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(see col. 3 and general formula 6, col. 5) wherein the naphthyl group may be cyano-substituted.

The above compound reads upon instant Formula A wherein R<sup>c</sup> and R<sup>i</sup> are cyano groups (as required by the present species election), R<sup>c</sup>, R<sup>d</sup>, R<sup>h</sup>, and R<sup>g</sup> are hydrogen atoms, and R<sup>f</sup> represents a substituted unsaturated alkyl group. It is further noted that an “unsaturated alkyl group” as claimed is being interpreted to include an alkenyl group.

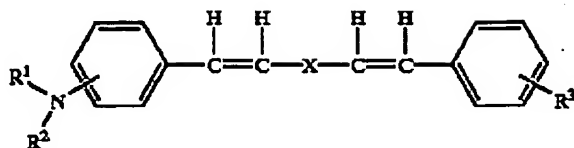
11. Claims 1-9 are rejected under 35 U.S.C. 102(e) as being anticipated by Ishibashi et al. (US 6,555,254 B1).

The applied reference has common inventors with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 102(e) might be overcome either by a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not the invention “by another,” or by an appropriate showing under 37 CFR 1.131.

Ishibashi et al. discloses electroluminescent elements comprising the following compound :

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General formula (1):



(see abstract) wherein X may be a cyano-substituted naphthyl group (see general formula 4, col. 4). The above compound reads upon instant Formula A wherein  $R^e$  and  $R^i$  are cyano groups (as required by the present species election),  $R^c$ ,  $R^d$ ,  $R^h$ , and  $R^g$  are hydrogen atoms, and  $R^f$  represents a substituted unsaturated alkyl group. It is further noted that an “unsaturated alkyl group” as claimed is being interpreted to include an alkenyl group. Ishibashi et al. discloses the layers required by instant claims 3-5 (see ‘254 claims 2-4).

12. Claims 1-9 are rejected under 35 U.S.C. 102(e) as being anticipated by Ishibashi et al. (US 6,800,382 B1).

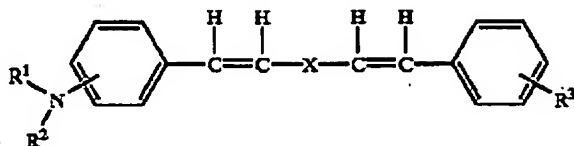
The applied reference has common inventors with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 102(e) might be overcome either by a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not the invention “by another,” or by an appropriate showing under 37 CFR 1.131.

Ishibashi et al. discloses electroluminescent elements comprising the following compound :



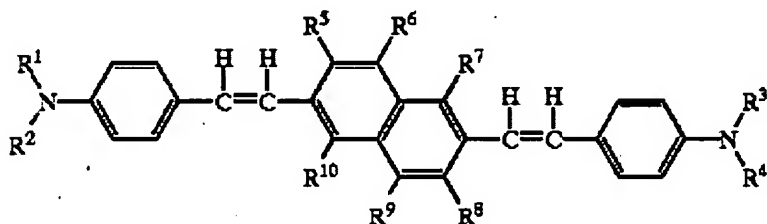
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General formula (1):



(see abstract) wherein X may be a cyano-substituted naphthyl group (see general formula 4, col. 23). The above compound reads upon instant Formula A wherein  $R^e$  and  $R^i$  are cyano groups (as required by the present species election),  $R^c$ ,  $R^d$ ,  $R^h$ , and  $R^g$  are hydrogen atoms, and  $R^f$  represents a substituted unsaturated alkyl group. It is further noted that an “unsaturated alkyl group” as claimed is being interpreted to include an alkenyl group. Ishibashi et al. discloses the layers required by instant claims 3-5 (see ‘382 claims 9-11).

13. Claims 1-9 are rejected under 35 U.S.C. 102(b) as being anticipated by Tadashi et al. (US 6,265,088 B1). Tadashi et al. discloses electroluminescent elements comprising the following compound :



(see abstract) wherein the naphthyl group may be a cyano-substituted (see par. abstract). The above compound reads upon instant Formula A wherein  $R^e$  and  $R^i$  are cyano groups (as required by the present species election),  $R^c$ ,  $R^d$ ,  $R^h$ , and  $R^g$  are hydrogen atoms, and  $R^f$  represents a substituted unsaturated alkyl group. It is further noted that an “unsaturated alkyl group” as

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claimed is being interpreted to include an alkenyl group. Tadashi et al. discloses the layers required by instant claims 3-5 (see '088 claims 6-8).

### ***Double Patenting***

14. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

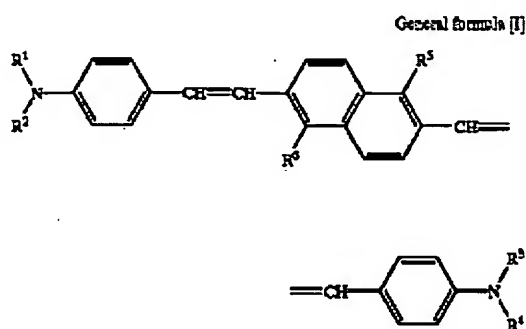
A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

15. Claims 1-9 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1, 2, and 8-11 of U.S. Patent No. 6,800,382 B2. Although the conflicting claims are not identical, they are not patentably distinct from each other because the general formula I compounds set forth by '382 encompass compounds of the instant claims. The general formula I compound or '382 reads upon instant Formula A wherein R<sup>e</sup> and R<sup>i</sup> are cyano groups, R<sup>d</sup>, R<sup>h</sup>, and R<sup>g</sup> are hydrogen atoms, and R<sup>f</sup> represents a substituted unsaturated alkyl group. It is further noted that an "unsaturated alkyl group" as claimed is being interpreted to include an alkenyl group. Ishibashi et al. discloses the layers required by instant claims 3-5 (see '382 claims 9-11).

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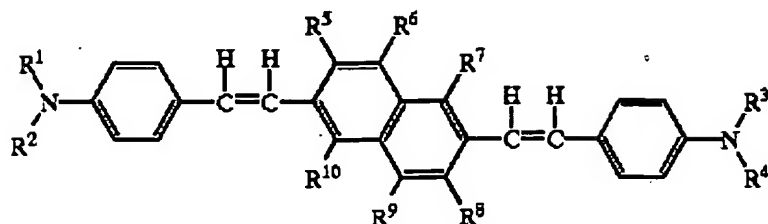
16. Claims 6-9 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claim 1 of U.S. Patent No. 6,492,557 B1. Although the conflicting claims are not identical, they are not patentably distinct from each other because the compounds set forth by '557 encompass compounds of the instant claims. Ichimura et al. discloses electroluminescent elements comprising the following compound :



wherein the naphthyl group may be cyano-substituted. The above compound reads upon instant Formula A wherein R<sup>c</sup> and R<sup>i</sup> are cyano groups, R<sup>c</sup>, R<sup>d</sup>, R<sup>h</sup>, and R<sup>g</sup> are hydrogen atoms, and R<sup>f</sup> represents a substituted unsaturated alkyl group. It is further noted that an "unsaturated alkyl group" as claimed is being interpreted to include an alkenyl group.

17. Claims 1-9 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-8 of U.S. Patent No. 6,265,088 B1. Although the conflicting claims are not identical, they are not patentably distinct from each other because the compounds set forth by '088 encompass compounds of the instant claims. '088 discloses electroluminescent elements comprising the following general formula I compounds:

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wherein the naphthyl group may be a cyano-substituted. The above compound reads upon instant Formula A wherein  $R^a$  and  $R^b$  are a substituted and an unsubstituted aryl group respectively,  $R^c$  and  $R^i$  are cyano groups,  $R^c$ ,  $R^d$ ,  $R^h$ , and  $R^g$  are hydrogen atoms,  $R^f$  represents a substituted unsaturated alkyl group. It is further noted that an “unsaturated alkyl group” as claimed is being interpreted to include an alkenyl group. Tadashi et al. discloses the layers required by instant claims 3-5 (see ‘088 claims 6-8).

18. Claims 1-9 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 29-31, 33, 35, 49-53 of copending Application No. 10/009,021. Although the conflicting claims are not identical, they are not patentably distinct from each other because the compounds set forth by ‘021 encompass compounds having a naphthyl group according to the instant claims. The above compound reads upon instant Formula A wherein  $R^c$  and  $R^i$  are cyano groups,  $R^c$ ,  $R^d$ ,  $R^h$ , and  $R^g$  are hydrogen atoms,  $R^f$  represents a substituted unsaturated alkyl group. It is further noted that an “unsaturated alkyl group” as claimed is being interpreted to include an alkenyl group. ‘021 further claims the layers required by instant claims 3-5.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

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***Response to Arguments***

19. Applicant's arguments with respect to the claims have been considered but are moot in view of the new ground(s) of rejection.

***Conclusion***

20. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dawn Garrett whose telephone number is (571) 272-1523. The examiner can normally be reached Monday through Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rena Dye can be reached at (571) 272-3186. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Dawn Garrett  
Primary Examiner  
Art Unit 1774